

CLAIMS

What is claimed is:

1. An apparatus for introducing at least two medical devices within vasculature, comprising:
an elongate inner member; and
an introducer sheath having an internal bore sized to receive the
5 elongate inner member;
wherein the elongate inner member and introducer sheath cooperate to receive the at least two medical devices.
2. The apparatus of claim 1, wherein the elongate inner member operates as a dilator.
3. The apparatus of claim 1, wherein the elongate inner member further comprises a proximal end, a terminal end, and at least one groove extending longitudinally from the proximal end to proximate the terminal end.
4. The apparatus of claim 1, the elongate inner member further comprising a proximal end, a terminal end, and a first groove and a second groove each extending longitudinally along the elongate member.

5. The apparatus of claim 4, wherein the first groove extends from the proximal end to the terminal end and the second groove extends from the proximal end to a point proximal of the terminal end.

6. The apparatus of claim 4, wherein the first and second grooves each extend from the proximal end to a point proximal of the terminal end.

7. The apparatus of claim 4, the elongate inner member further comprising a distal end and a proximal end, the proximal end defining a hub configured with a plurality of lumens.

8. The apparatus of claim 7, wherein one of the plurality of lumens is in communication with the first groove and another of the plurality of lumens is in communication with the second groove.

9. The apparatus of claim 1, the elongate inner member further comprising a proximal end and a distal end, and a lock attached to the proximal end, the lock being configured to lock the introducer sheath to the inner member.

10. The apparatus of claim 1, the introducer sheath further comprising a distal end and a proximal end, the proximal end defining a handle.

11. The apparatus of claim 10, wherein the handle is adapted to be fractured into two pieces.

12. The apparatus of claim 1, the introducer sheath further comprising at least one longitudinally extending perforation along which the sheath can be split.

13. The apparatus of claim 1, the introducer sheath further comprising a pair of longitudinally extending perforations spaced 180° circumferentially apart along the introducer sheath.

14. The apparatus of claim 1, wherein the inner member has a tapered distal end portion.

15. The apparatus of claim 14, wherein the introducer sheath extends along the elongate inner member to a point adjacent a tapered distal end portion.

16. The apparatus of claim 1, the elongate inner member further comprises at least one longitudinally extending groove and wherein the internal bore of the introducer sheath and the longitudinally extending groove define a lumen for receiving a guidewire.

17. The apparatus of claim 16, wherein the at least one longitudinally extending groove permits the inner member to slip off the guidewire when the introducer sheath is removed.

18. The apparatus of claim 1, the elongate inner member further comprises two longitudinally extending grooves, wherein one of the longitudinally extending grooves terminates at the terminal end of the introducer sheath and the other longitudinally extending groove terminates at a point proximal of the terminal end of the introducer sheath such that there is only one opening at the terminal end of the device.

19. The apparatus of claim 1, wherein the apparatus has a length sufficient to extend from a cut down in a femoral artery to a bifurcation in the aorta.

20. A method for providing a path to a target site within a vessel using an introducer sheath assembly, comprising:

gaining access to a femoral artery of a patient;

inserting the introducer sheath assembly within the femoral artery;

5 and

advancing the introducer sheath so that a distal end thereof is adjacent a bifurcation in an aorta.

21. The method of claim 20, wherein the introducer sheath assembly is configured to receive a plurality of medical devices and the inserting step includes advancing the introducer sheath assembly over a guidewire.

22. The method of claim 20, wherein the introducer sheath assembly includes an inner member received within an introducer sheath and further comprising advancing the inner member and introducer sheath to the target site and subsequently withdrawing the inner member from the
5 vasculature independent of the introducer sheath.

23. The method of claim 22, wherein the inner member includes a first longitudinally extending groove and a second longitudinally extending

groove and further comprising advancing a first wire through the first groove
and advancing a second wire through the second groove such that the first wire
10 and second wire are separated and cannot cross or twist.